UNM LEARN

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# Take Test: Quiz 3.5

## Test Information

| | |
|---|---|
| Description | |
| Instructions | |
| Multiple Attempts | This test allows multiple attempts. |
| Force Completion | This test can be saved and resumed later. |

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**QUESTION 1**                                        **1 points**    Saved

True or false?  The only way to create a state-space model from a transfer function is via phase variable form.

○ True

● False

≫ Question Completion Status:

**QUESTION 2**                                        **1 points**    Saved

Which of the following is most correct?

○ A transfer function cporresponds to multiple state-space models.

● A transfer function corresponds to an infinite number of state-space models.

○ A transfer function does not correspond to any state-space models.

○ A transfer function corresponds to exactly one state-space model.

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**QUESTION 3**                                          **1 points**    | Saved |

Which of the following accurately describes the order of the state-space model for a transfer function with an $m^{th}$ order numerator and an $n^{th}$ order denominator?

● The state vector has $n$ elements.

○ The state vector has $n + m$ elements.

○ The state vector has $n + 1$ elements.

○ The state vector has $m$ elements.

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**QUESTION 4**                                          **1 points**    | Saved |

In phase variable form, the coefficients of the transfer function in appear in

● The $A$ and $C$ matrices.

○ The $B$ and $C$ matrices.

○ The $A$ and $B$ matrices.

○ The $A$ matrix only.

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*Click Save and Submit to save and submit. Click Save All Answers to save all answers.*

| Save All Answers |        **Save and Submit**